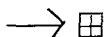


01-09-02

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Please type a plus sign (+) inside this box



Modified PTO/SB/05 (03-01)
Approved for use through 10/31/2002 OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. HA-87 (HAL-ID 202)
First Inventor Carl SCARPA
Title A NOVEL OFDM CHANNEL ESTIMATION
TECHNIQUE USING THE CONSTANT MODULUS
Express Mail Label No. EL836805585US

10/04/02
JC879 U.S. PTO
01/07/02

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

- 1 ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
- 2 ☐ Applicant claims small entity status.
See 37 CFR 1.27.
- 3 ☒ Specification [Total Pages 34]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table,
or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
- 4 ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 7]
5. Oath or Declaration w/Power of Attorney [Total Pages 3]
 - a. ☒ Newly executed (original or copy)
 - b. ☐ Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 18 completed)
 - c. ☐ DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b)
- 6 ☐ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

- 7 ☐ CD-ROM or CD-R in duplicate, large table or
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
37 CFR 3.73(b) Statement of Power of Attorney
(when there is an assignee)
- 10 ☐ English Translation Document (if applicable)
- 11 ☐ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
- 12 ☐ Preliminary Amendment
- 13 ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
- 14 ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
- 15 ☐ Nonpublication Request under 35 U.S.C. 122
(b)(2)(B)(i). Applicant must attach form PTO/SB/35
or its equivalent.
- 16 ☐ Other:
- 17 ☐ Other:

18 If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment,
or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.:
Prior application information Examiner Group Art Unit

For CONTINUATION OR DIVISIONAL APPS only The entire disclosure of the prior application, from which an oath or declaration is supplied under
Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference
The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) 26479 or ☐ Correspondence address below

Name Straub & Pokotylo
Address 1 Bethany Road
Suite 83, Bldg. 6
City Hazlet State N.J. Zip Code 07730
Country USA Telephone (732) 335-1222 Fax (732) 335-1228

Name (Print/Type) Michael P. Straub Registration No. (Attorney/Agent) 36,941
Signature Michael P. Straub Date January 7, 2002

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Washington, DC 20231

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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision

Complete if Known

Application Number	Not yet assigned
Filing Date	Herewith
First Named Inventor	Carl SCARPA
Examiner Name	Not yet assigned
Group Art Unit	Not yet assigned
Attorney Docket No.	HA-87 (HAL-ID 202)

TOTAL AMOUNT OF PAYMENT (\$) 1,314.00

METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to.

Deposit Account Number 50-1049
Deposit Account Name Straub & Pokotylo

☒ Charge any deficiency or credit any overpayment

☐ Applicant claims small entity status See 37 CFR 1.27

2. ☒ Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101 740	201 370	Utility filing fee	740.00
106 330	206 165	Design filing fee	
107 510	207 255	Plant filing fee	
108 740	208 370	Reissue filing fee	
114 160	214 80	Provisional filing fee	

SUBTOTAL (1) (\$) 740.00

2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
31	-20** = 11	X 18	= 198.00
7	-3** = 4	X 84	= 336.00
Multiple Dependent			

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103 18	203 9	Claims in excess of 20
102 84	202 42	Independent claims in excess of 3
104 280	204 140	Multiple dependent claim, if not paid
109 84	209 42	**Reissue independent claims over original patent
110 18	210 9	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 534.00

**or number previously paid, if greater, For Reissues, see above

FEE CALCULATION (continued)

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	
139 130	139 130	Non-English specification	
147 2,520	147 2,520	For filing a request for <i>ex parte</i> reexamination	
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115 110	215 55	Extension for reply within first month	
116 400	216 200	Extension for reply within second month	
117 920	217 460	Extension for reply within third month	
118 1,440	218 720	Extension for reply within fourth month	
128 1,960	228 980	Extension for reply within fifth month	
119 320	219 160	Notice of Appeal	
120 320	220 160	Filing a brief in support of an appeal	
121 280	221 140	Request for oral hearing	
138 1,510	138 1,510	Petition to institute a public use proceeding	
140 110	240 55	Petition to revive - unavoidable	
141 1,280	241 640	Petition to revive - unintentional	
142 1,280	242 640	Utility issue fee (or reissue)	
143 460	243 230	Design issue fee	
144 620	244 310	Plant issue fee	
122 130	122 130	Petitions to the Commissioner	
123 50	123 50	Processing fee under 37 CFR 1.17(q)	
126 180	126 180	Submission of Information Disclosure	
581 40	581 40	Recording each patent assignment per property (times number of properties)	40.00
146 740	246 370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149 740	249 370	For each additional invention to be examined (37 CFR § 1.129(b))	
179 740	279 370	Request for Continued Examination (RCE)	
169 900	169 900	Request for expedited examination of a design application	
Other fee (specify) _____			
SUBTOTAL (3) (\$) 40.00			

SUBMITTED BY

Name (Print/Type)	Michael P. Straub	Registration No (Attorney/Agent)	36,941	Telephone	(732) 335-1222
Signature	Michael P. Straub	Date	1/7/02		

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